Report and Discussion

In July a state team of education stakeholders from over 20 states convened at the annual National Association of System Heads State Academic Leaders P-16 Summer Institute. Keynote speakers used international and national data to identify the challenges the nation is facing in preparing students from all demographic categories for college and employment in a knowledge-based, global economy. Breakout presentations highlighted local and state programs effective at raising student achievement levels, increasing persistence and graduation through high school and college, preparing an adequate supply of teachers able to teach diverse students to higher standards, and developing P-16+ data systems to hold K-12 and postsecondary systems accountable for results.

Dr. Keith Bird, chancellor, Kentucky Community and Technical College System, gave a plenary presentation on the important role played by community colleges in providing access to postsecondary education and to critical work skills. Dr. Gary Brockway, provost and vice president for academic affairs, Murray State University, spoke on MuSU's successful efforts to increase the persistence and graduation rates of its students. Linda France spoke on the curricular and instructional support that the department is providing to teachers as demands for greater rigor and more consistent achievement increase. The Kentucky team included 20 representatives from across the state representing the P-16 community.

The Kentucky team reviewed and discussed possible foci of P-16 work to undertake over the coming year, highlighting a rigorous curriculum, dual enrollment, an integrated P-16 data system, and educator quality and supply. (See attachment V-1; additional materials will be handed out at the September 6 meeting.) P-16 Council Chair Dorie Combs has added affordability and access as an additional significant area of policy concern. As a member of the American Diploma Project Network, the Kentucky team also received a special state data profile prepared by Achieve, Inc., the organization overseeing the American Diploma Project, in partnership with the National Governors' Association. (See attachment V-2.) The document reviews Kentucky's performance in preparing students for college by comparing Kentucky student progress through the educational pipeline with that of students nationally and in top performing states.

The Council will discuss these policy issues and guide the staffs on the policy agenda for the coming year.

2005 Kentucky NASH Team Notes Key Issues for 2005-06 P-16 Agenda Setting Priorities

- 1. 21st-Century literacy
 - Adolescent
 - Adult/family
 - Non-English-speaking
 - Building community support for a comprehensive literacy effort
- 2. Cross-sector, student-level longitudinal data system
 - P-16 indicators of progress
- 3. Local P-16 councils
 - Sustainability, accountability
- 4. Mathematics strategy
 - Standards, instruction, teacher quality (and supply)
- 5. Recruitment and retention of quality K-12 educators
- 6. Postsecondary and adult education faculty development in instructional delivery systems
- 7. Dual enrollment, dual credit, AP, IB
 - Policy issues
 - Data needs
 - Credit-based transition
- 8. Integrating college-access/preparation programs
 - GEAR UP
 - Bridges/Career Pathways
 - P-16 engineering strategy
 - KEMTP
 - Gohigherky.org
 - State Scholars
 - TRIO
- 9. Affordability strategy
 - KEES revisions (KHEAA)
 - Adult learning, financial aid
 - Need-based aid
 - Improved counseling/communication
- 10. Transition from high school to college and the skilled workplace
 - High school restructuring
 - More rigorous curriculum
 - Standards aligned to P/S and workplace
 - Assessment request for proposals
 - Educators prepared



KentuckyData Profile

Achieve developed this profile in partnership with the National Governors Association for the 2005 National Education Summit on High Schools

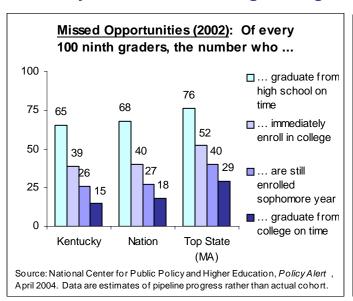
February 2005

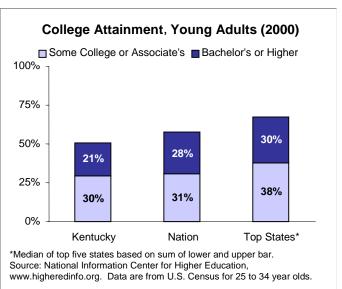




To be successful in today's economy, all students will need education and training that go beyond the high school diploma. The data below show how successful your state is in moving students successfully through the education pipeline. How many graduate from high school? How many drop out? How many go on to postsecondary education, either a four-year institution or community college? How many are well enough prepared when they get there to be successful and ultimately earn a bachelor's or associate's degree? How is your state doing against the national average and top-performing states?

How many make it to, and through, college? How many young adults earn degrees?





Is educational attainment improving?

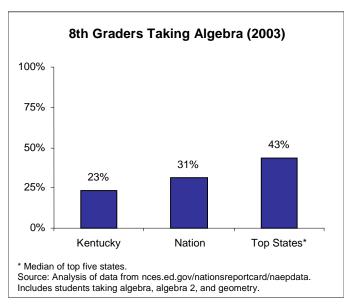
Bachelor's Degree or Higher (1990)	Bachelor's Degree or Higher (2000)	Kentucky's Improvement	Nation's Improvement	Top Improver (MN)
15.5%	20.8%	+ 5.3	+ 4.8	+ 8.7



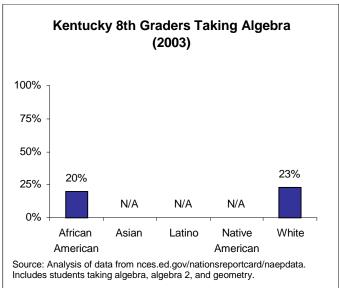


Preparation for postsecondary education and good jobs begins well before high school. Students who take challenging courses and meet high standards in middle school are much more likely to enter high school ready to succeed. Algebra is widely recognized as a "gateway" course—students who take it by the end of 8th grade are much more likely to take rigorous courses in high school that lead to a college degree.

Are students taking "gateway" courses?



Are there inequities in course taking?

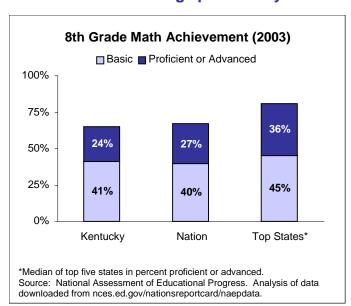


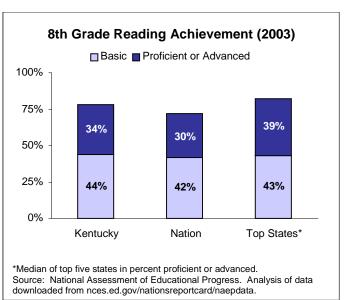
Are more students taking gateway courses over time?

8th Graders Taking Algebra in 1992	8th Graders Taking Algebra or Higher in 2003	Kentucky's Improvement	Nation's Improvement	Top Improver (CA)
16%	23%	+ 7	+ 12	+ 35

While each state gives its own reading and math assessments in grades 3-8, the standards for proficiency on those tests differ from state to state, making cross state comparisons unreliable. The National Assessment of Educational Progress (NAEP) is a common test taken by a sample of students in *every* state, making it a reliable yardstick for comparing achievement through middle school.

Are students achieving "proficiency" in math? ... in reading?







Middle School, continued



Is math achievement improving?

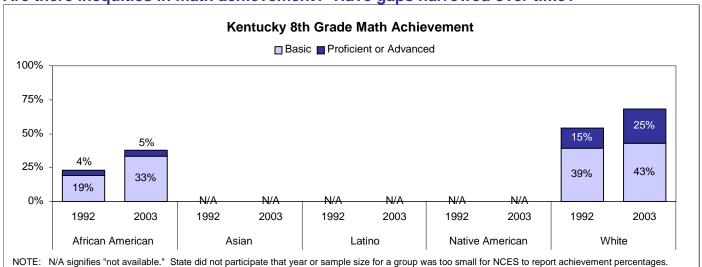
At or Above Proficient in 1992	At or Above Proficient in 2003	Kentucky's Improvement	Nation's Improvement	Top Improver (NC)
14%	24%	+ 10	+ 7	+ 20

Is reading achievement improving?

At or Above	At or Above	Kentucky's	Nation's	Top Improver (DE)
Proficient in 1992	Proficient in 2003	Improvement	Improvement	
30%	34%	+ 4	0	+ 8

In most states, there is an achievement gap that separates African American, Hispanic and Native American students from white and Asian students. How large is that gap and how successful has your state been in closing it over time?

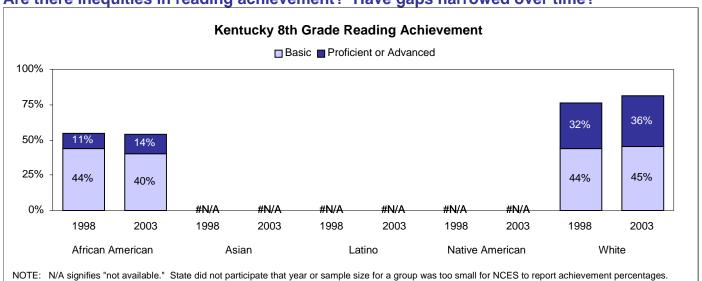
Are there inequities in math achievement? Have gaps narrowed over time?



Are there inequities in reading achievement? Have gaps narrowed over time?

Source: National Assessment of Educational Progress. Analysis of data downloaded from nces.ed.gov/nationsreportcard/naepdata.

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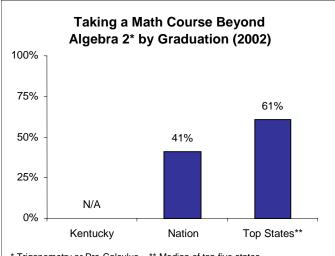






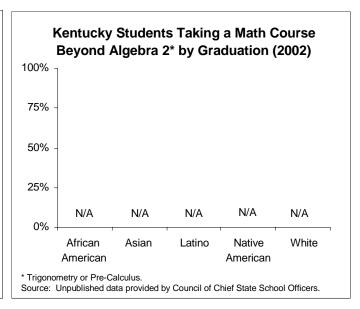
Research has shown that a powerful predictor of whether high school students will graduate and earn a college degree isn't only grades or even test scores, but rather the rigor of the high school curriculum they complete. Taking a high-level math course beyond Algebra 2 is a key indicator of such a curriculum. Advanced Placement (AP) exams show how many students are taking challenging courses and attempting to earn college credit while still in high school.

Are students taking "gateway" courses?



* Trigonometry or Pre-Calculus. ** Median of top five states. Source: Council of Chief State School Officers, State Indicators of Science and Mathematics Education 2002, 2003, p. 27.

Are there inequities in course taking?

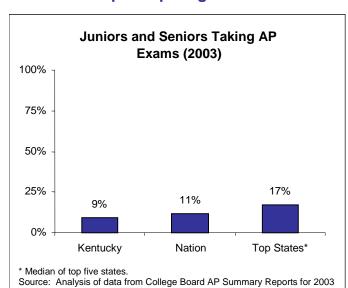


Are more students taking gateway courses over time?

% Taking Trig/Pre- Cal by Graduation in 1992	% Taking Trig/Pre- Cal by Graduation in 2002	Kentucky's Improvement	Nation's Improvement	Top Improver (WV)
N/A	N/A	N/A	+ 12	+ 44

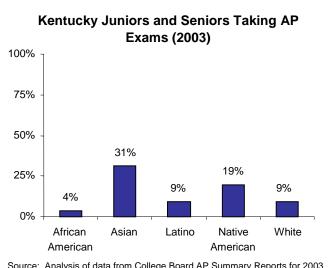
^{*} Trigonometry or Pre-Calculus.

Are students participating in AP courses?



and NCES Common Core of Data. Includes public school students only.

Are there inequities in AP participation?



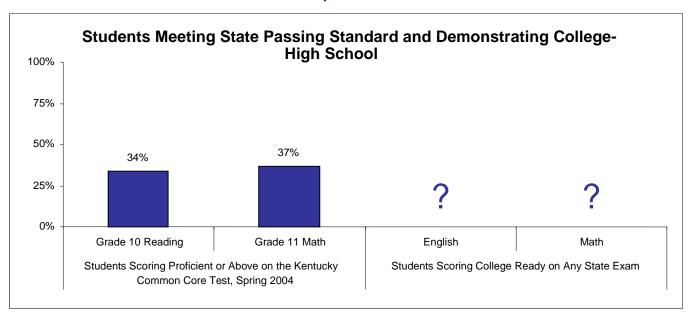


Are more students participating in AP over time?

1997 % 11th & 12th Graders Taking AP Tests	2003 % 11th & 12th Graders Taking AP Tests	Kentucky's Improvement	Nation's Improvement	Top Improver (MD)
5.1%	8.9%	+ 3.8	+ 3.7	+ 7.4

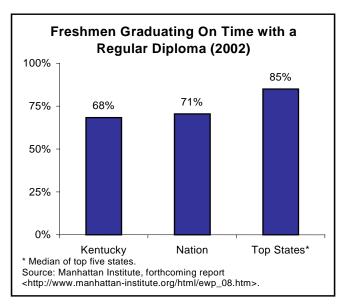
All states have high school assessments that students take by the 10th or 11th grade. In almost half of the states, students must pass these tests in order to graduate. The question each state should ask is whether students who pass the high school tests are truly prepared for success in college or work. Few states have designed their high school assessments to answer the question of whether students who pass are prepared for success in college and work.

How do students perform on State tests?

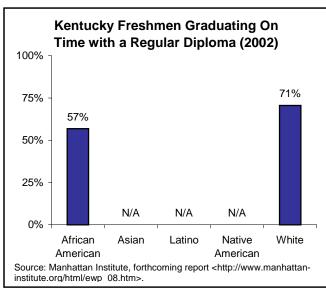


Nationwide, nearly 30% of high school students don't graduate on time, and the figures are much lower for disadvantaged minority students than for white and Asian students. Without a high school diploma, students' chances for success in college or the workplace are severely restricted.

How many students graduate on time?



Are graduation rates equitable?



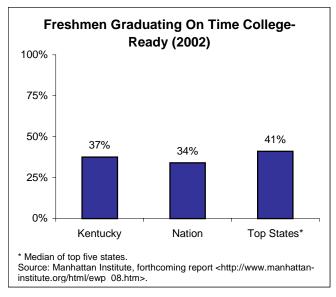


Are high school graduation rates improving over time?

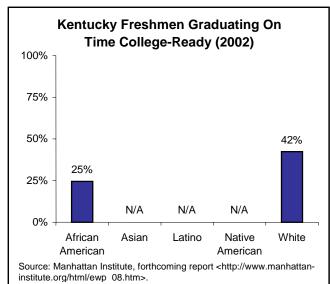
High School Graduation Rate (1992)	High School Graduation Rate (2002)	Kentucky's Improvement	Nation's Improvement	Top Improver (NV)
72%	68%	- 4	- 2	+ 9

Jay Greene and Greg Forster of the Manhattan Institute have created several measures of college readiness. The data below considers whether students have earned a regular high school diploma, have completed the minimum coursework necessary to apply to college, and performed at least at the basic level on the NAEP reading test.

How many students prepare for college?



Are rates of college preparation equitable?



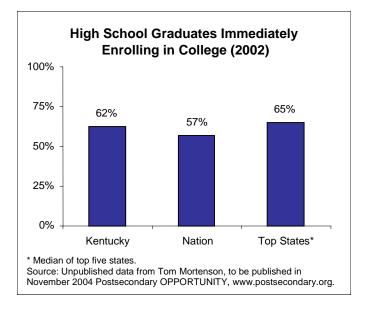
Are college-readiness rates improving over time?

College Readiness	College Readiness	Kentucky's	Nation's	Top Improver
Rate (1992)	Rate (2002)	Improvement	Improvement	(WV)
27%	37%	+ 11	+ 7	



Earning a postsecondary credential has become increasingly important in today's economy, and some states have made significant gains in college going rates. However, college admission is only the first step. Nationally, a quarter of college freshmen will not return for their sophomore year. Only slightly more than half of students in 4-year colleges earn a degree within six years. The better prepared students are when they graduate from high school, the better their chances of getting into and succeeding in college.

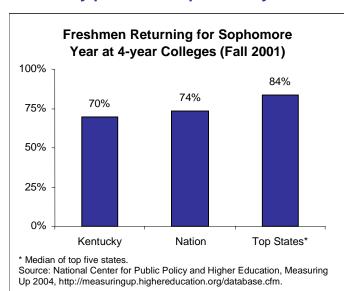
How many high school students enroll in college the following fall?



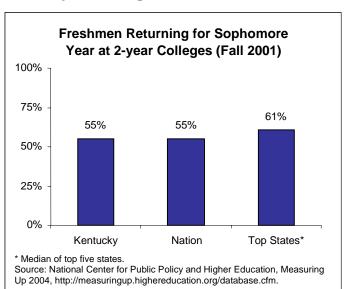
Are more high school graduates enrolling immediately in college over time?

Immediate College Going Rate, 1992	Immediate College Going Rate, 2002	Kentucky's Improvement	Nation's Improvement	Top Improver (SC)
49%	62%	+ 13	+ 2.3	+ 16

How many persist to sophomore year?



... at 2-year colleges?





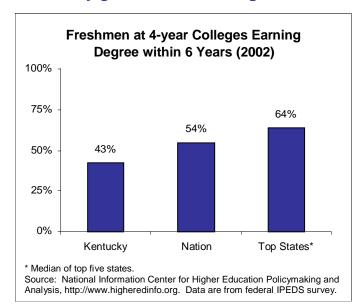
Postsecondary Attainment, continued



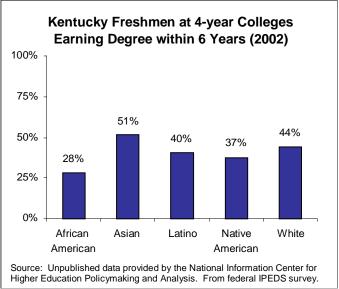
Are college retention rates improving over time?

Retention Rates at 4-	Retention Rates at 4-	Kentucky's	Nation's	Top State (NV)
Year Colleges, 1988	Year Colleges, 2001	Improvement	Improvement	
69%	70%	1.0%	-1.2%	12.3%

How many graduate from college?



Are college graduation rates equitable?



Are college graduation rates improving over time?

6-year Grad Rate from 4-Year Institutions, 1997	6-year Grad Rate from 4-Year Institutions, 2002	Kentucky's Improvement	Nation's Improvement	Top Improvers*
37%	43%	+ 5.4	+ 2.1	+ 10

^{*} Median of top three states (AK, ID, and WY).

Postscript

The <u>State Data Profile</u> shows how well your state is doing in preparing students for college by comparing your students' progress through the education pipeline with that of students nationally and in top performing states. This profile includes only those data that were available for <u>all</u> states. However, your state education agency and postsecondary institutions may have additional data disaggregated by county, program, district, school, or individual that allow a deeper understanding and richer picture of these education pipeline issues:

1. Are your middle schools preparing students for success in high school?

- As students transition from elementary through middle school do they make steady progress in math and reading achievement?
- What percentage of your 8th grade students are at grade level in math and reading? Are there
 achievement gaps among groups of 8th grade students, by race, ethnicity, poverty, second
 languages, and other factors?

2. Are your high schools preparing students for entry into college and credit-bearing coursework?

- What percentage of your high school students takes a college and work preparatory curriculum (Algebra I, Geometry, Algebra II, and data analysis and statistics, and 4 years of grade level English)?
- What percentage of the high school students in your state earn college credit while in high school?
- Do those students actually complete their college program/degree in greater numbers and shorter time than students who do not have access to those programs?
- What is the college remediation rate for high school graduates entering your state institutions? Does this vary for different groups of students?
- What indicators of academic preparation <u>best predict</u> which high school students will need remediation when they enroll in postsecondary education (e.g., course taking patterns in high school, test scores on middle or high school assessments?)

3. How many of your students successfully complete their degree/program once they are enrolled in your state's 2- and 4-year colleges?

- Which of your state's 2- and 4-year colleges are doing the best job of graduating students on time?
- What is the employment rate of postsecondary students who complete postsecondary programs/degrees?